

Specimen No. 3. A full set of baleen of one side the maxillary is in the Mus. Essex Institute, Salem, Mass. A portion of this, kindly lent me, exhibits the following characters: Compared with that of the *A. gibbosus*, it is longer and has narrower basis. The plates moderately and simply concave, while those of the latter are sigmoidal, most curved near the outer margin, in cross section. The bristles of the California species are very coarse, varying from one to three series between the enamel plates. The bristles of the *A. gibbosus* much finer, three series together. Length of the latter 8.5 inches, width at base 4.4 inches. In the *Agaphelus glaucus* Cope, 22 in. in length, width at base 6 in. In the former nearly 6 in an inch, in the latter 2½. The baleen of the *A. gibbosus* belonged to the specimen above described.

Two rough outlines accompany Capt. Dall's notes. Both represent the pectoral fin as rather elongate, not pointed, but rather broad at the extremity. A third sketch represents the inferior view, and in it we see two lines for grooves, one on each side the median gular line. This feature, if existing, is interesting, as indicating a tendency to the plicæ of the fin back whales.

This species has usually one calf at a birth, but one was recently taken at San Diego with two fœtuses. Penis 27 in. long, smooth, coarsely papillose, slightly bifid at tip, where the urethra is about the size of a goose quill. (Dall's m. s.)

Oct. 6th.

The President, DR. HAYS, in the Chair.

Thirty-five members present.

The following paper was presented for publication:

Notice of some American Leeches. By Joseph Leidy, M. D.*

Oct. 13th.

MR. CASSIN, Vice-President, in the Chair.

Thirty-four members present.

The following papers were presented for publication:

Notice of some Remains of Extinct Vertebrata. By Joseph Leidy, M. D.

On the Origin of Genera. By Edward D. Cope.

On some Cretaceous Reptilia. By Edward D. Cope.

On variations in *Taxodium*. By Thomas Meehan.

Oct. 20th.

The President, DR. HAYS, in the Chair.

Thirty-six members present.

Dr. F. A. Genth made some observations on the occurrence of cupriferous ores in Texas.

Dr. A. R. Roessler, Geologist at the U. S. General Land Office at Washington, had sent him for examination a specimen from Weatherford, Archer Co., Texas. It was a piece of copperglance, containing 55.44 per cent. of copper, pseudomorphous after wood or a vegetable substance. It resembled so much similar pseudomorphs found in the Permian formation at Frankenberg in Hesse, and 1868.]

elsewhere in Europe, that he pointed out the probability of its occurring also in the Permian formation, and requested Dr. Roessler to obtain fuller details with reference to its occurrence. A few days ago Dr. Roessler received an answer to his inquiries from the General Land Office agent in Texas, with more specimens, and the following report, which he sent to me:

"After traversing the cretaceous and carboniferous series northward of Weatherford, Archer Co., Texas, I was agreeably surprised by a grand panorama of the Permian formation. This system is extensively developed in Russia between the Oural Mountains and the River Volga, in the north of England, and in Germany, where it is mined for its treasures of copper, silver, nickel and cobalt ores. It has not heretofore been known to exist in this State, or it had been mistaken for the Triassic system, which is overlying the former to the south-east. Its hills, which have been traced throughout Archer and Wichita Counties, resemble in shape the copper-bearing or gossan-crested upheavals in Ducktown, Tenn., but they are of a different age and composition. They are nearly barren, and, towering above the most beautiful mesquit prairies fringed by the finely-timbered bottoms of the tributaries of Red River, are exceedingly picturesque. The members of the Wichita System, as far as open to ocular inspection by out-crops or cross-cuts, making allowance for climatic differences, correspond closely with the lower strata, discovered at Perm and Mansfield, but its mineral resources are evidently more promising. Such numerous veins of copper ore have been traced over the summits and sides of the hills, that hardly a hundred and sixty acre tract could be found without ore on the surface. The ore crops out, as, for instance, on the Isbell Douglass Ball, in such quantity and quality that the mere collection of it, without mining, would prove remunerative. It is supposed that those veins are contemporaneous with injections at different ages of quartz, trap and porphyry. The vein lodes are parallel with the strata, but there is sufficient evidence that they partake of the nature of true veins. Cupriferous and ferruginous cross-courses, feeders and leads of manganese are often met with. A cross-cut was made to a depth of about fifteen feet upon the Isbell lode, and ten hours work resulted in the raising of 6000 pounds of copper ore. This ore is far superior to the ferrosulphuret of copper, or copper pyrites, which ore is most generally worked in England, and it is, in fact, more profitable than the native copper as found at Lake Superior. It is easily smelted, and the strata in which it is found can also be more economically excavated than any other in which copper ores occur."

Dr. Le Conte, in continuation, spoke of the occurrence of calamite tinged with copper in the Permian formation of Southern Mexico.

Mr. Gabb mentioned the deposits of grey copper near the Colorado River, in Arizona, scattered over the surface, the debris of metallic veins.

Dr. Leidy remarked, that shad had been brought to our markets, for several years past, during the late autumnal months, which were caught in salt water, perhaps in Delaware Bay or off the Jersey coast. When the shad ascend the river to spawn, their stomachs and intestines appear to contain so little that the question is often asked as to the nature of their food. A shad which Dr. L. had purchased a few days since, on examination, was found to have the stomach full of small fishes. There were 30 of them, from 2 to 4 inches long, and all one species, which appears to be the Sand-launce, *Ammodytes Americanus*.

Oct. 27th.

MR. VAUX, Vice-President, in the Chair.

Twenty-six members present.

Philip S. Wales, M. D., was elected a member.

[Oct.